

## MANUEL DE LEÓN. ABRIDGED CURRICULUM VITAE

### Personal Data

Present position Research Profesor, Consejo Superior de Investigaciones Científicas,  
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### Degrees

1978 Ph.D. in Mathematics, Universidad de Santiago de Compostela  
1975 Graduated in Mathematics, Universidad de Santiago de Compostela

### Visiting Positions

Universidade Federal Fluminense, University of Calgary, University of Gent,  
University of Mannheim.

### Research Interests

Differential geometry, symplectic geometry, Poisson manifolds, Cosserat media,  
nonholonomic mechanics, geometric integrators, optimal control theory.

### Select publications

(For a complete list visit MathSciNet and Web of Knowledge)

### ARTICLES

- L.A. Cordero, **M. de León**, M. Fernández: Examples of compact non-Kähler almost Kähler manifolds. *Proc. Amer. Math. Soc.*, **95**, 2 (1985) 280-286.
- F. Cantrijn, **M. de León**, E.A. Lacomba: Gradient vector fields on cosymplectic manifolds. *Journal of Physics A: Math. Gen.*, **25** (1992), 175-188.
- **M. de León**, D. Martín de Diego: On the geometry of non-holonomic Lagrangian systems. *J. Math. Phys.* **37** (7) (1996), 3389-3414.
- **M. de León**, M. Epstein: Geometrical Theory of Uniform Cosserat Media. *Journal of Geometry and Physics* **26** (1998), 127-170.
- **M. de León**, M. Fernández, R. Ibáñez: The canonical spectral sequences for Poisson manifolds. *Israel Journal of Mathematics* **106** (1998), 133-155.
- F. Cantrijn, **M. de León**, D. Martín de Diego: On almost-Poisson structures in nonholonomic mechanics. *Nonlinearity* **12** 3 (1999), 721-737.
- **M. de León**, M. Epstein: Continuous distributions of inhomogeneities in liquid-crystal-like bodies. *Royal Society of London Proceedings Series A: Math. Phys. Eng. Sci.* **457** 2014 (2001), 2507-2520.
- J. Cortés, **M. de León**, D. Martín de Diego, S. Martínez: Geometric description of vakonomic and nonholonomic dynamics. Comparison of solutions. *SIAM Journal of Control and Optimization* **41** 5 (2003), 1389-1412.

- **M. de León**, D. Martín de Diego, A. Santamaría-Merino: Geometric Numerical Integration of Nonholonomic Systems and Optimal Control Problems, *European Journal of Control* **10** (2004), 520-526.
- **M. de León**, J.C. Marrero, E. Martínez: Lagrangian submanifolds and dynamics on Lie algebroids. *J. Phys. A: Math. Gen.* **38** (2005), R241-R308. (Topical review).

## BOOKS

- **M. de León**, P.R. Rodrigues: *Generalized Classical Mechanics and Field Theory*. North-Holland Mathematics Studies, 112, North-Holland, Amsterdam, 1985.
- **M. de León**, P.R. Rodrigues: *Methods of Differential Geometry in Analytical Mechanics*. North-Holland Mathematics Studies, 158, North-Holland, Amsterdam, 1989.
- L.A. Cordero, C.T.J. Dodson, **M. de León**: *Geometry of Frame Bundles. Mathematics and Its Applications*, Kluwer Academic Publishers, Dordrech, 1989.
- *Fotografiando las Matemáticas*, Carroggio, Barcelona, 2000. Editor.

## Societies

Member of AMS, SIAM, RSME, RSEF, EMS, FESPM.

## Editorial Boards

Extracta Mathematicae, Reports on Mathematical Physics, Journal of Geometry and Symmetry in Physics, Mediterranean Mathematical Journal, International Journal of Geometric Methods in Modern Physics.

## Organization of Scientific events

- Member of Organizing Committees and Scientific Committees of a number of workshops and conferences.
- Coordinator for the World Mathematical Year 2000 in Spain.
- Chairman of the ICM 2006, Madrid

## Offices

- Vicepresident of the Real Sociedad Matemática Española (until 2005)
- President of the Spanish Committee of Mathematics
- Director of the Department of Mathematics, CSIC.
- Member of the Committee of Physics and Physical Engineering, CSIC, 2001-
- Coordinator of Mathematics of the Spanish Agency for Evaluation and Prospective (Ministry of Education and Science), 2003-2005
- Member (Experimental Sciences) of the Advisor Committee for Evaluation and Prospective (Ministry of Education and Science), 2005-